STANFORD UNIVERSITY MEDICAL CENTER PALO ALTO, CALIFORNIA

DEPARTMENT OF GENETICS School of Medicine June 18, 1962

Mr. G.A. Derbyshire Space Science Board National Academy of Sciences 2101 Constitution Avenue Washington 25, D.C.

Dear George:

Reference, your letter of June 7.

1. I can see no drastic reasons to react strongly to the proposal that fecal wastes be jettisoned either in terrestrial orbit or in lunar landing missions. Whatever risks are involved are already encompassed in the hazard of flying the astronaut himself. There might, however, be some more emotional reaction to this that ought to be cautioned against and kept in mind in detailing the disposal. It would be unfortunate if large amounts of contaminated material were indescriminately scattered over the lunar surface, especially if this were done in such a way as to make it impossible to identify the point of deposition. Again, this is a hazard that may very well attach to man himself, but there is no point in going out of our way to create difficulties. Such wastes should, therefore, be deposited only in hermetically sealed containers together with substantial amounts of some long lived radioactive isotope that could be used retrospectively as a tracer. Such deposits should also be made only in the immediate vicinity of sites well established as lunar bases, the vicinity of which will have to be regarded as potentially highly contaminated in any case.

These considerations should be sufficiently self evident, particularly in regard to the avoidance of less well informed reactions that I do not believe there is much point in organizing any special discussion unless the reactions to your letter indicate a wide divergence of opinion. These remarks are not intended as an endorsement of a contamination policy at the present time, but reflect the belief that before manned lunar flights are actually attempted we will have sufficient information about the lunar environment to better evaluate the general hazards of lunar contamination.

7 The bibliography on <u>Aerospace Medicine and Biology</u> has very dubious value by comparison with the other documentation activities to which NASA is now committed. However, you will understand that my reaction to this material is conditioned by my own special interests which may not be quite congruent with those of people more actively concerned with the field of space medicine. Mr. G.A. Derbyshire

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Rather than expend much energy on this particular issue, I think the Board could serve a much more useful function by which-dogging the whole information program in NASA or at least being sure that, this does have the benefit of critical review by scientists who use it. (On the whole I think they are doing very well now, but this is just by comparison with the medieval programs in the handling of information in other agencies.)

Yours sincerely,

Joshua Lederberg Professor of Genetics

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